

B.S. – MATHEMATICS (Engineering Concentration)

Dual Degree Options:

Stockton: BS in Mathematics; Rutgers: BS in Mechanical Engineering, Civil Engineering, Biomedical and Bioenvironmental Engineering

Stockton: BS in Mathematics; NJIT: BS in Mechanical Engineering

Rowan: BS in Electrical Mechanical, Civil, or Biomedical Engineering

All courses require a “C” or better.

Core Course Requirements: 80 credits

- MATH 2215 Calculus I (5)
- MATH 2216 Calculus II (5)
- MATH 2217 Calculus III (5)
- MATH 2225 Discrete Math (EE and CoE) (4)
- MATH 3323 Linear Algebra (4)
- MATH 3325 Foundations of MATH (4)
- MATH 3328 Differential Equations (4)
- PHYS 2220/25 Physics I w/lab (6)
- PHYS 2230/35 Physics II w/lab (6)

Two Upper Level Math or Math-Based engineering approved by program coordinator (6-8)

- _____
- _____

Group I Choose ONE course (4 credits):

- MATH 4431 Real Analysis
- MATH 4432 Complex Analysis
- MATH 4441 Abstract Algebra
- MATH 4445 Topics in Geometry

Group II Choose ONE course (4 credits):

- MATH 4451 Probability and Statistics I
- MATH 4452 Probability and Statistics II
- MATH 4461 Numerical Analysis
- MATH 4471 Computer Algorithms
- MATH 4472 Theory of Computation
- MATH 4481 Topics in Mathematics (may be in Group I)

Cognate Courses:

- PHYS 3200 Mechanics of Materials (4) **OR**
PHYS 3110 Electronics **and** PHYS 3120 Electrical Circuits (4)
- PHYS 3220 Computational Mechanics (4)
- ENGN 4600 Engineering Seminar (3rd & 4th yrs) (0)
and a full year of transferred engineering courses

General Studies Requirements: 48 credits Total

32 Credits in 'G' Category Courses

No more than 12 credits in any “G” category may be applied towards the BS degree

- FRST 1120 Rhetoric & Composition
- GIS–General Integration & Synthesis – up to 4 credits*
- GAH–General Arts and Humanities
- GAH/GSS Freshman Seminar
- GSS–General Social Science**
- Upper GSS/GAH** _____

8 transferred engineering credits

*Must be taken junior or senior year

** Student must complete 2 GSS and 2 GAH courses



At Some Distance Electives: 16 credits

Courses unrelated to your major

- GEN 2180 Engineering Graphics and CAD (4)
- CSIS 2101 Programming and Problem Solving I **OR** (4)
C++ Course
- MGMT 2110 Intro to Management (4)
- ECON 1400 Introduction to Microeconomics (4)

General Studies Outcome Requirement

These courses are listed as attributes and should be completed within the 128 credits needs to graduate.

- Arts (A) Historical Consciousness (H)
- Values/Ethics (V) International/Multicultural (I)

Writing Requirement (4 courses)

Two W1 courses may be in transfer. W2 courses must be taken at Stockton

W1 _____ W1/W2 _____

W1/W2 _____

W1/W2–3000 level _____

Quantitative Reasoning Requirements (3 courses)

Two Q1 courses may be in transfer. Q2 courses must be taken at Stockton

Q1 _____ Q2 _____ Q1 or Q2 _____